

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS:

1. (Currently Amended) An apparatus for evaporative cooling of a liquid product, comprising: a vacuum chamber ~~possessing upper~~ including a top wall and lower end walls a bottom wall and divided into a first space chamber centrally positioned with respect to the longitudinal axis of the vacuum chamber and a second space chamber which concentrically surrounds the first space chamber and in which both the first and second spaces chambers are open towards the ~~upper end~~ top wall of the vacuum chamber, and the first space chamber has an outlet for condensed steam and the second space chamber has an inlet for steamed product, ~~as well as~~ and an outlet for the product; a circulation circuit for coolant liquid, wherein the first space chamber has an upper part located inside the vacuum chamber and a lower part located beneath the bottom wall of the vacuum chamber, and the lower part extends ~~is extended~~ downwards so that it extends at least as long below the lower end bottom wall of the vacuum chamber so that the length of the lower part below the bottom wall is at least the same as the length ~~as the extent of the first space of the upper part~~ inside the vacuum chamber; and a coolant conduit positioned in a ~~portion~~ inside the lower part of the first space chamber located below the lower end bottom wall for delivering coolant to cool the condensed steam.

2. (Currently Amended) The apparatus as claimed in Claim 1, wherein the ~~first space has an~~ upper part of the first chamber located inside the vacuum chamber and ~~[[a]] the lower part of the first chamber~~ located beneath the ~~lower end~~ bottom wall of the vacuum chamber are configured to be detachable from each other.

3. (Previously Presented) The apparatus as claimed in Claim 1, wherein the inlet for product is tangentially disposed in a side wall of the vacuum chamber and is formed as a vertical gap.

4. (Currently Amended) The apparatus as claimed in Claim 1, wherein the circulation circuit for coolant water discharges ~~with a~~ via the conduit in an upper region of a lower part of the first ~~space~~ chamber.

5. (Previously Presented) The apparatus as claimed in Claim 1, wherein the outlet for condensed steam is a spillway overflow.

6. (Previously Presented) The apparatus as claimed in Claim 4, wherein the conduit is provided in its upper region with a number of downwardly directed apertures.

7. (Previously Presented) The apparatus as claimed in Claim 4, wherein the circulation circuit for coolant liquid includes an outlet, conduits, a centrifugal pump, as well as a cooler.

8. (Currently Amended) The apparatus as claimed in Claim 1, wherein ingress and egress of the coolant is at a lower portion of the lower part of the first ~~space~~ chamber.